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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/575,762

Applicant(s)

BOLLE ET AL.

Examiner

PETER CHAU

Art Unit

2476

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date 10/7/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Receipt is acknowledged of amendment filed on 10/7/2009. Claim(s) 4, 9 and 10 have not been amended. Claim(s) 1-3, 5-8 were amended. Claim(s) 11-16 are newly added.

Response to Arguments

2. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection. Examiner is using a reference, US Patent 7,385,998 which is cited in a new IDS submitted on 10/7/2009, for the rejection of claim(s) as shown below.

Information Disclosure Statement

3. An initialed and dated copy of Applicant's IDS form 1449 submitted on 10/7/2009, is attached to the Office Action.

Claim Objections

4. Claim(s) 1, 5, 6, 11 and 12 is/are objected to because of the following informalities: it is suggested to change "transported the entire path" and "transportable the entire path" to "transported through an entire path" and "transportable through an entire path", respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim(s) 1, 5-6, 10-12 and 16 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) and in further view of U.S. Patent 7,385,998 to Wang.

As per claim 1, AAPA teaches a method of transmitting Ethernet data frames from a first local area network (LAN) to a second local area network (LAN) comprising the steps of (Amended Background, first page lines 32-33, discloses transport of Ethernet frames between two different LANs; Amended Background first page line 11, discloses LANs being Ethernet. One of the two different LANs corresponds to a first Ethernet LAN and the other LAN is a second Ethernet LAN):
transmitting Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) data stream and transmitting Ethernet Frames via a first En-network to a Synchronous Digital Hierarchy (SDH)-level network and receiving a transmission at the second local area network through the SDH-level network and transmitting frames into the second local area network (Amended Background, lines 32-33, discloses transport of Ethernet frames between two

different LANs; Amended Background first page line 11, discloses LANs being Ethernet; Amended Background first page lines 20-23, discloses transporting data between different networks using SDH; Amended Background first page lines 26-27, discloses PDH technology is an intermediate level between Ethernet LAN's and SDH-level. One of the two different LANs corresponds to a first Ethernet LAN and the other LAN is a second Ethernet LAN).

AAPA is silent on **mapping Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) data stream via a Generic Framing Procedure (GFP) and transmitting said mapped Ethernet frames via a first En-network to a Synchronous Digital Hierarchy (SDH)-level network and receiving the transmission at the second local area network through the SDH-level network and demapping the mapped Ethernet frames from the first local area network via the Generic Framing Procedure and transmitting said demapped frames into the second local area network and wherein the Ethernet frames are transported the entire path from the first local area network to the second local area network without any additional mapping or demapping other than that performed in said mapping step and said demapping step.**

However, Wang teaches mapping Ethernet to be transported over T1 links (col.5 lines 15-17) via generic framing procedure (GFP) (col. 5 lines 18-29) at a subscriber premise equipment (col. 7 lines 40-44). Wang also teaches, transmitting a GFP frame containing one or more of LAN service packets to a network access device over a T1/E1 line (col. 5 lines 31-42 and fig. 3). The network access device then pass the GFP

frames to the optical interface for transmission over sonet if sonet supports GFP (col. 5 lines 31-52). Wang also discloses in the reverse process, packets arriving at the optical interface is the same as the forward process and where GFP is supported on the optical link a GFP frame received may be passed directly to the GFP framer and eventually transmitted to a subscriber premise equipment for reconstruction (demapping) and then the PDUs are output onto a LAN (col. 8 lines 10-39). As shown above, the only mapping and demapping occurs at the subscriber premises equipment without any additional mapping or demapping being done.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of AAPA to have mapping Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) data stream via a Generic Framing Procedure (GFP) and transmitting said mapped Ethernet frames via a first En-network to a Synchronous Digital Hierarchy (SDH)-level network and receiving the transmission at the second local area network through the SDH-level network and demapping the mapped Ethernet frames from the first local area network via the Generic Framing Procedure and transmitting said demapped frames into the second local area network and wherein the Ethernet frames are transported the entire path from the first local area network to the second local area network without any additional mapping or demapping other than that performed in said mapping step and said demapping step, as suggested by Wang. This combination would benefit the system by reducing the number of service mappers (Wang abstract).

As per claim 5, AAPA teaches a system for transmitting Ethernet data frames from a first local area network (LAN) to a second local area network (LAN), comprising (Amended Background, first page lines 32-33, discloses transport of Ethernet frames between two different LANs; Amended Background first page line 11, discloses LANs being Ethernet. One of the two different LANs corresponds to a first Ethernet LAN and the other LAN is a second Ethernet LAN):

Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) format and means for transmitting Ethernet frames via a first En-network to an SDH-level network (Amended Background, first page lines 32-33, discloses transport of Ethernet frames between two different LANs; Amended Background first page line 11, discloses LANs being Ethernet; Amended Background first page lines 20-23, discloses transporting data between different networks using SDH; Amended Background first page lines 26-27, discloses PDH technology is an intermediate level between Ethernet LAN's and SDH-level. One of the two different LANs corresponds to a first Ethernet LAN and the other LAN is a second Ethernet LAN. The PDH technology that is between the first Ethernet LAN and the SDH is the first EN-network).

AAPA is silent on **means for mapping Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) format via a Generic Framing Procedure (GFP) and means for transmitting said mapped Ethernet frames via a first En-network to an SDH-level network and wherein the Ethernet frames are transportable the entire path from the first local area network to the**

second local area network without any additional mapping other than that performed in said means for mapping.

However, Wang teaches mapping Ethernet to be transported over T1 links (col.5 lines 15-17) via generic framing procedure (GFP) (col. 5 lines 18-29) at a subscriber premise equipment (col. 7 lines 40-44). Wang also teaches, transmitting a GFP frame containing one or more of LAN service packets to a network access device over a T1/E1 line (col. 5 lines 31-42 and fig. 3). The network access device then pass the GFP frames to the optical interface for transmission over sonet if sonet supports GFP (col. 5 lines 31-52). Wang also discloses in the reverse process, packets arriving at the optical interface is the same as the forward process and where GFP is supported on the optical link a GFP frame received may be passed directly to the GFP framer and eventually transmitted to a subscriber premise equipment for reconstruction (demapping) and then the PDUs are output onto a LAN (col. 8 lines 10-39). As shown above, the only mapping and demapping occurs at the subscriber premises equipment without any additional mapping or demapping being done.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of AAPA to have mapping Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) data stream via a Generic Framing Procedure (GFP) and transmitting said mapped Ethernet frames via a first En-network to a Synchronous Digital Hierarchy (SDH)-level network and receiving the transmission at the second local area network through the SDH-level network and demapping the mapped Ethernet frames from the first local area network

via the Generic Framing Procedure and transmitting said demapped frames into the second local area network and wherein the Ethernet frames are transported the entire path from the first local area network to the second local area network without any additional mapping or demapping other than that performed in said mapping step and said demapping step, as suggested by Wang. This combination would benefit the system by reducing the number of service mappers (Wang abstract).

As per claim 6, the combination teaches **the system of claim 5, additionally comprising means for:**

receiving the transmission (AAPA, Amended Background, first page lines 32-33, discloses transport of Ethernet frames. Wang col. 8 lines 35-39, discloses receiving GFP frames) **at the second local area network** (Amended Background, first page lines 32-33 and line 11) **through the SDH-level network** (AAPA, Amended Background first page lines 21-27) **via a second En-network** (AAPA, Amended Background first page lines 20-32. The PDH technology between the second LAN and the SDH is the second En-network),

demapping (Wang col. 8 lines 35-39, discloses reconstruction) **the mapped Ethernet frames from the first local area network** (Amended Background, first page lines 32-33 and line 11; Wang col. 8 lines 35-39) **via Generic Framing Procedure** (Wang col. 5 lines 18-20),

and transmitting (AAPA, Amended Background first page lines 32-33 , discloses transport of Ethernet frames) **said demapped frames** (AAPA, Amended

Background, first page lines 32-33; Wang col. 8 lines 35-40, discloses extracted of GFP frame, i.e. the PDU) **into the second local area network** (Amended Background, first page lines 32-33 and line 11), **wherein the Ethernet frames** (AAPA, Amended Background, first page lines 32-33) **are transportable the entire path from the first local area network to the second local area network** (Amended Background, first page lines 32-33) **without any additional mapping or demapping other than that performed by said means for mapping step and said means for demapping** (Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39).

Examiner provides the same rationale for the combination as stated in claim 5.

As per claim 10, the combination teaches **the system of claim 5, wherein the first and second LANs are Ethernet LANs** (AAPA, Amended Background first page line 11 and lines 32-33).

As per claim 11, AAPA teaches **a system for transmitting Ethernet data frames from a first local area network (LAN) to a second local area network (LAN)** (Amended Background, first page lines 32-33, discloses transport of Ethernet frames between two different LANs; Amended Background first page line 11, discloses LANs being Ethernet. One of the two different LANs corresponds to a first Ethernet LAN and the other LAN is a second Ethernet LAN), **comprising a first node** (Amended Background second page line 1, discloses complex equipment) **having:**

Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) format and transmit said Ethernet frames via a first En-network to an SDH-level network (Amended Background, first page lines 32-33, discloses transport of Ethernet frames between two different LANs; Amended Background first page line 11, discloses LANs being Ethernet; Amended Background first page lines 20-23, discloses transporting data between different networks using SDH; Amended Background first page lines 26-27, discloses PDH technology is an intermediate level between Ethernet LAN's and SDH-level. One of the two different LANs corresponds to a first Ethernet LAN and the other LAN is a second Ethernet LAN. The PDH technology that is between the first Ethernet LAN and the SDH is the first EN-network).

AAPA is silent on **a mapper configured to map Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) format via a Generic Framing Procedure (GFP), a transmitter configured to transmit said mapped Ethernet frames via a first En-network to an SDH-level network, wherein the Ethernet frames are transportable the entire path from the first local area network to the second local area network without any additional mapping other than that performed by the mapper.**

However, Wang teaches mapping Ethernet to be transported over T1 links (col.5 lines 15-17) via generic framing procedure (GFP) (col. 5 lines 18-29) mapper (fig. 3 shows a GFP framer) at a subscriber premise equipment (col. 7 lines 40-44). Wang also teaches, transmitting a GFP frame containing one or more of LAN service packets to a

network access device over a T1/E1 line (col. 5 lines 31-42 and fig. 3) via a line interface (fig. 3 shows a line I/F (transmitter)). The network access device then pass the GFP frames to the optical interface for transmission over sonet if sonet supports GFP (col. 5 lines 31-52). Wang also discloses in the reverse process, packets arriving at the optical interface is the same as the forward process and where GFP is supported on the optical link a GFP frame received may be passed directly to the GFP framer and eventually transmitted to a subscriber premise equipment for reconstruction (demapping) and then the PDUs are output onto a LAN (col. 8 lines 10-39). As shown above, the only mapping and demapping occurs at the subscriber premises equipment without any additional mapping or demapping being done.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of AAPA to have a mapper configured to map Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) format via a Generic Framing Procedure (GFP), a transmitter configured to transmit said mapped Ethernet frames via a first En-network to an SDH-level network, wherein the Ethernet frames are transportable the entire path from the first local area network to the second local area network without any additional mapping other than that performed by the mapper, as suggested by Wang. This combination would benefit the system by reducing the number of service mappers (Wang abstract).

As per claim 12, the combination teaches **the system of claim 11, further comprising a second node** (Wang col. 8 lines 35-39, discloses a receiving end subscriber premises equipment) **having:**

a receiver configured to receive (Wang col. 8 lines 35-39, discloses line interface unit receiving) **the transmission** (AAPA, Amended Background, first page lines 32-33, discloses transport of Ethernet frames. Wang col. 8 lines 35-39, discloses receiving GFP frames) **at the second local area network** (Amended Background, first page lines 32-33 and line 11) **through the SDH-level network** (AAPA, Amended Background first page lines 21-27) **via a second En-network** (AAPA, Amended Background first page lines 20-32. The PDH technology between the second LAN and the SDH is the second En-network),

a demapper configured to demap the mapped (Wang col. 8 lines 35-39, discloses GFP framer reconstruct to an original data from a GFP frame) **Ethernet frames** (Amended Background, first page lines 32-33 and line 11) **from the first local area network** (Amended Background, first page lines 32-33 and line 11) **via Generic Framing Procedure** (Wang col. 5 lines 18-20),

and a transmitter configured to transmit (Wang fig. 3 shows a LAN interface; col. 8 lines 35-39, discloses outputting the reconstructed data on the LAN) **said demapped frames** (AAPA, Amended Background, first page lines 32-33; Wang col. 8 lines 35-40, discloses extracted GFP frame, i.e. the PDU) **into the second local area network** (Amended Background, first page lines 32-33 and line 11),

wherein the Ethernet frames (AAPA, Amended Background, first page lines 32-33) are transportable the entire path from the first local area network to the second local area network (Amended Background, first page lines 32-33) without any additional mapping or demapping other than that performed by the mapper and the demapper (Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39).

Examiner provides the same rationale for the combination as stated in claim 11.

As per claim 16, the combination teaches **the system of claim 11, wherein the first and second LANs are Ethernet LANs (AAPA, Amended Background first page line 11 and lines 32-33).**

7. Claims 2-4, 7-9 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Wang and in further view of EP 1 229 692 to Flavin et al (hereinafter "Flavin").

As per claim 2, the combination teaches **the method of claim 1.**

Although the combination teaches **wherein the first and second LANs are Ethernet LANs (AAPA, Amended Background first page line 11 and lines 32-33) and mapping (Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39) and the first En-network (AAPA, Amended Background first page lines 20-33), the combination is silent on wherein said**

mapping is carried out at a junction point between the first Ethernet LAN and a first En-network.

However, Flavin discloses mapping at a first node (i.e. a junction point), being disposed between a first network and an intermediate network (pg. 3 lines 36-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have wherein wherein said mapping is carried out at a junction point between the first Ethernet LAN and a first En-network, as suggested by Flavin. This combination would benefit the system by enabling a tunneling of a frame from a first network to a second network (Flavin [0011]).

As per claim 3, the combination teaches the method of claim 1.

Although the combination teaches **wherein the first and second LANs are Ethernet LANs** (AAPA, Amended Background first page line 11 and lines 32-33) and **demapping** (Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39) and **a second En-network** (AAPA, Amended Background first page lines 20-33, discloses PDH is between an Ethernet LAN and SDH. The PDH technology between the second LAN and SDH is the second En-network) **positioned between the SDH-level network and the second Ethernet LAN** (AAPA, Amended Background line 11, discloses LANs being Ethernet; Amended Background lines 20-23, discloses transporting data between different networks using SDH; Amended Background lines 26-27, discloses PDH technology is an intermediate level between Ethernet LAN's and SDH-level. One of the two different

LANs corresponds to a first Ethernet LAN and the other LAN is a second Ethernet LAN. One of the PDH is the second En-network), the combination is silent on **wherein said demapping is carried out at a junction point between a second En-network positioned between the SDH-level network and the second Ethernet LAN.**

However, Flavin discloses at a second node (i.e. a junction point), being disposed between a second network and an intermediate network and at said second node, reassembling (demapping) a frame (pg. 3 lines 36-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have wherein said demapping is carried out at a junction point between a second En-network positioned between the SDH-level network and the second Ethernet LAN, as suggested by Flavin. This combination would benefit the system by enabling a tunneling of a frame from a first network to a second network (Flavin [0011]).

As per claim 4, the combination teaches **the method of claim 1.**

Although the combination teaches **the transport of the GFP frames** (AAPA, Amended Background, first page lines 32-33. Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39) **through the SDH-network** (AAPA Amended Background first page lines 20-33), the combination is silent on **transport of the GFP frames through the SDH-network is carried out using virtual containers (VCx-containers).**

However, Flavin teaches a virtual container is the basic payload carrying unit in SDH (pg. 6 line 11) and virtual containers, VC-x, may be transported in the SDH frame as data packets and where x indicates the size of the virtual containers, for example VC-4, VC-3 or VC-11 (pg. 6 lines 14-29). Examiner correspond VC-x to applicant's VCx-containers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have the transport of the GFP frames through the SDH-network is carried out using virtual containers (VCx-containers), as suggested by Flavin. This combination would benefit the system by having generic and all-purpose transport containers for transporting data since it is the basic payload carrying unit in SDH.

As per claim 7, the combination teaches the system of claim 5.

Although the combination teaches **mapping** (Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39), **first LAN** (Amended Background, first page lines 32-33 and line 11) and **the first En-network** (AAPA, Amended Background first page lines 20-33), the combination is silent on **in which the means for said mapping is arranged at a junction point between the first Ethernet LAN and the first En-network.**

However, Flavin discloses mapping at a first node (i.e. a junction point), being disposed between a first network and an intermediate network (pg. 3 lines 36-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have in which the means for said mapping is arranged at a junction point between the first Ethernet LAN and the first En-network, as suggested by Flavin. This combination would benefit the system by enabling a tunneling of a frame from a first network to a second network (Flavin [0011]).

As per claim 8, the combination teaches the system of claim 6.

Although the combination teaches **demapping** (Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39), **second En-network** (AAPA, Amended Background first page lines 20-33) and **the second LAN** (Amended Background, first page lines 32-33 and line 11), the combination is silent on **according to which said means for demapping is arranged at a junction point between the second En-network and the second LAN.**

However, Flavin discloses at a second node (i.e. a junction point), being disposed between a second network and an intermediate network and at said second node, reassembling (demapping) a frame (pg. 3 lines 36-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have according to which said means for demapping is arranged at a junction point between the second En-network and the second LAN, as suggested by Flavin. This combination would benefit the system by enabling a tunneling of a frame from a first network to a second network (Flavin [0011]).

As per claim 9, the combination teaches **the system of claim 5**.

Although the combination teaches **the transport of the GFP frames** (AAPA, Amended Background, first page lines 32-33. Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39) **through the SDH-network** (AAPA Amended Background first page lines 20-33), the combination is silent on **the transport of the GFP frames though the SDH-network is carried out by means of so called virtual containers, VCx-containers**.

However, Flavin teaches a virtual container is the basic payload carrying unit in SDH (pg. 6 line 11) and virtual containers, VC-x, may be transported in the SDH frame as data packets and where x indicates the size of the virtual containers, for example VC-4, VC-3 or VC-11 (pg. 6 lines 14-29). Examiner correspond VC-x to applicant's VCx-containers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have the transport of the GFP frames though the SDH-network is carried out by means of so called virtual containers, VCx-containers, as suggested by Flavin. This combination would benefit the system by having generic and all-purpose transport containers for transporting data since it is the basic payload carrying unit in SDH.

As per claim 13, the combination teaches **the system of claim 12**.

Although the combination teaches **the demapper** and **the second En-network** and **the second LAN**, the combination is silent on **wherein the demapper is arranged at a junction point between the second En-network and the second LAN**.

However, Flavin discloses at a second node (i.e. a junction point), being disposed between a second network and an intermediate network and at said second node, reassembling (demapping) a frame (pg. 3 lines 36-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have wherein the demapper is arranged at a junction point between the second En-network and the second LAN, as suggested by Flavin. This combination would benefit the system by enabling a tunneling of a frame from a first network to a second network (Flavin [0011]).

As per claim 14, the combination teaches **the system of claim 11**.

Although the combination teaches **the mapper** and **the first LAN** and **the first En-network**, the combination is silent on **wherein the mapper is arranged at a junction point between the first LAN and the first En-network**.

However, Flavin discloses mapping at a first node (i.e. a junction point), being disposed between a first network and an intermediate network (pg. 3 lines 36-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have wherein the mapper is arranged at a junction point between the first LAN and the first En-network, as suggested by

Flavin. This combination would benefit the system by enabling a tunneling of a frame from a first network to a second network (Flavin [0011]).

As per claim 15, the combination teaches the system of claim 11.

Although the combination teaches **the transport of the GFP frames** (AAPA, Amended Background, first page lines 32-33. Wang col.5 lines 15-17; col. 5 lines 18-29; col. 7 lines 40-44; col. 5 lines 31-42 and fig. 3; col. 5 lines 31-52; col. 8 lines 10-39) **through the SDH-network** (AAPA Amended Background first page lines 20-33), the combination is silent on **in which the transport of the GFP frames through the SDH-network is carried out with virtual containers (VCx-containers).**

However, Flavin teaches a virtual container is the basic payload carrying unit in SDH (pg. 6 line 11) and virtual containers, VC-x, may be transported in the SDH frame as data packets and where x indicates the size of the virtual containers, for example VC-4, VC-3 or VC-11 (pg. 6 lines 14-29). Examiner correspond VC-x to applicant's VCx-containers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have in which the transport of the GFP frames through the SDH-network is carried out with virtual containers (VCx-containers), as suggested by Flavin. This combination would benefit the system by having generic and all-purpose transport containers for transporting data since it is the basic payload carrying unit in SDH.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER CHAU whose telephone number is (571)270-7152. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./
Examiner, Art Unit 2476

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2476